

issue of Jones' Contributions may be recorded by way of persiflage. Intermixed with all this diatribe one finds traces of sardonic humor that enliven the pages a bit; a definition of systematic botany as something which is done as far away as possible from the field where the living plants are found and with as little knowledge of them as possible.

Botanical history is full of eulogy of botanists with a sprinkling here and there of detraction. There is no objection to eulogy and doubtless detraction does not matter. That which matters in systematic botany is something utterly impersonal and has to do only with the plant and the records concerning it. At one time, long ago, botanists were well content to describe a new species from the "Northwest Coast" or from "California." Nowadays there is not only demanded an exact station, but also the essential facts regarding the edaphic conditions, associated species, climate and altitude. In this respect Jones' specimens are often deficient. His plants usually carry locality labels but the place name may be hopelessly obscure or be a duplicated place name.

This man has in California one or two strong admirers. One or both can perform a real service to western botany and do for Jones' records what he could not do for them himself, that is supply certain essential facts which will enable his stations to be defined. At this time a running itinerary would furnish the necessary clues. This is a plain duty. Caecilius Plinius Secundus has described well the stigma which attaches to a man who basks in the favor of another when living and yet refuses to do aught for him when he is dead. This canon of Roman manhood applies still to men of honor and sensibility. Let the one who has exalted Jones in life, turn not full away from him now that he is dead.—W. L. JEPSON.

## CRITICAL NOTES ON ERIOPHYLLUM LAG.—II

LINCOLN CONSTANCE

### The Achenes of *Trichophyllum multiflorum* Nuttall

Nuttall erected the genus *Trichophyllum* (1) upon *Actinella lanata* Pursh (2), and it was not until 1883 that the relation of this genus to *Eriophyllum* Lag. and *Bahia* Lag. was fully appreciated. During the period that the first genus was still considered valid, Hooker added to it *Trichophyllum integrifolium* (3), from specimens obtained by Douglas, and Nuttall described *Trichophyllum multiflorum* (4), which was based upon Wyeth's collections.

De Candolle (5) merged *Trichophyllum* and *Eriophyllum* with *Bahia*, and in 1876 (6) Gray reduced *Bahia multiflora* to synonymy with *Bahia integrifolia*, under the latter name. Seven

years later (7), he transferred this to *Eriophyllum*, where it constituted a part of *Eriophyllum caespitosum* var. *integrifolium*, a distinguishing character of which was that the achenes were "glabrous, rarely somewhat glandular-atomiferous near the summit" (8). Contrasted with this was *Eriophyllum gracile* Gray (7), synonymous with *Bahia gracilis* Hook. & Arn. (9) from *Tolmie* 69, "Snake County," with glandular achenes.

Rydberg revived Nuttall's species as *Eriophyllum multiflorum* (10), attributing to it glabrous achenes (11). Piper (12) took over this name for the common form of the Walla Walla Plateau, reduced to synonymy *Bahia gracilis* H. & A. (*Eriophyllum gracile* Gray), and described the achenes as glandular. Several botanists of the Northwest have followed him in this interpretation.

These diverse treatments may be summarized as follows:

**A. GRAY:** (a) Achenes "glabrous, rarely somewhat glandular-atomiferous near the summit"; *Eriophyllum caespitosum* Douglas var. *integrifolium* (Hook.) Gray (*Trichophyllum integrifolium* Hook.; *Trichophyllum multiflorum* Nutt.; *Bahia integrifolia* DC.; *Bahia multiflora* Nutt.). (b) Achenes glandular: *Eriophyllum gracile* (H. & A.) Gray (*Bahia gracilis* H. & A.).

**B. PIPER:** Achenes glandular: *Eriophyllum multiflorum* (Nutt.) Rydb. (*Trichophyllum multiflorum* Nutt.; *Bahia gracilis* H. & A.; *Eriophyllum gracile* Gray).

**C. RYDBERG:** (a) Achenes glabrous: *Eriophyllum multiflorum* (Nutt.) Rydb. (*Trichophyllum multiflorum* Nutt.). (b) Achenes "hispidulous, but rarely conspicuously glandular": *Eriophyllum integrifolium* (Hook.) Greene (*Trichophyllum integrifolium* Hook.; *Bahia integrifolia* DC.; *Eriophyllum caespitosum* var. *integrifolium* Gray). (c) Achenes "decidedly glandular-granuliferous": *Eriophyllum gracilis* (H. & A.) Gray (*Bahia gracilis* H. & A.).

The crux of the matter, then, is in the question: are the achenes of Wyeth's specimen glabrous, as asserted by Gray and by Rydberg, or are they glandular, as asserted by Piper? The writer had the opportunity to compare the type specimens of *Trichophyllum integrifolium* Hook., and *Bahia gracilis* H. & A. (loaned from Kew), with a photograph and achenes of the type of *Trichophyllum multiflorum* Nutt., obtained through the kindness of Dr. F. W. Pennell, from the Academy of Natural Sciences of Philadelphia. The achenes of *Bahia gracilis* were found to be glandular-muriculate. Those of *Trichophyllum integrifolium* and *Trichophyllum multiflorum* were alike in being, not glabrous, as Gray reported, but uniformly thinly hairy, with spreading, hyaline, clavate-lanceolate, non-glandular hairs.

If the distinction between glandular and non-glandular achenes is to be maintained, since all the other characters are quite similar in the three specimens, then Nuttall's species must

be considered synonymous with *Trichophyllum integrifolium* Hook., not with *Bahia gracilis* H. & A. The writer does not believe that this distinction in achene surface is of sufficient constancy or importance for separating any of the three, and proposes to place them together under *Eriophyllum lanatum* var. *integrifolium* (Hook.) Smiley (13).

- (1) Gen. N. Am. Pl. 1: 166. 1818.
- (2) Fl. Am. Sept. 560. 1814.
- (3) Fl. Bor.-Am. 1: 316. 1833.
- (4) Acad. Nat. Sci. Phil. Journ. 7: 35. 1834.
- (5) Prodr. 5: 656. 1836.
- (6) Bot. Cal. 1: 381. 1876.
- (7) Am. Acad. Proc. 19: 26. 1883.
- (8) Syn. Fl. 1<sup>2</sup>: 331. 1886.
- (9) Bot. Beechey Voy. 353. 1840.
- (10) N. Y. Bot. Gard. Mem. 1: 422. 1900.
- (11) N. Am. Fl. 34: 92. 1915.
- (12) U. S. Nat. Herb. Contr. 11: 583. 1906.
- (13) Univ. Calif. Publ. Bot. 9: 378. 1921.

University of California, Berkeley, December, 1933.

## THE BOTANICAL EXPLORERS OF CALIFORNIA.—XI

WILLIS LINN JEPSON

**George W. Dunn**

George W. Dunn was born in Seneca County, New York, on May 18, 1814. He taught a school of seventy-five pupils when he was sixteen. In 1850, when he was thirty-seven, the mining excitement of gold days drew him to California. For several years he worked in the placer mines, but lost all his money. From this moment he determined that he would try no further to make money and so turned collector for the rest of his life. From about 1860 until the time of his death in 1905, he gave his entire time to collecting a great variety of natural history objects, but especially plants and beetles. In the course of this work he traveled widely over California and made twelve trips into Lower California. He was with E. L. Greene on the expedition to Guadalupe and Cedros islands in 1885.

An extremely well known collector in early days, he was perhaps the most remarkable physically of any such in California. When scarcely more than a lad it was my chance to meet him for a few minutes. He was then seventy-seven, straight, powerfully built, full six feet tall, his head crowned by a dense thatch of gray-white hair. When eighty-eight he still climbed pine trees near one hundred feet high for cones, and at that time told me that he slept over night on the ground anywhere at will.

He was the discoverer of many new species; amongst others he first made known *Quercus Palmeri* Engelman from Lower California. This oak was named *Quercus Dunnii* by Albert Kellogg but Kellogg's publication was a little late and so failed in